

REMARKS

The Examiner has objected to the Specification for several informalities. Applicants have submitted amendments to the Specification which address those informalities.

The Examiner has objected to Claims 1-10 due to informalities in Claims 1 and 8. Applicants believe that the Examiner intended to object to Claims 1 and 9. Applicants have submitted amendments to Claims 1 and 9 to address the lack of antecedent basis for the term "audio stream".

Claims 1, 3-5 and 7-10 have been rejected under 35 USC 103 as being unpatentable over Chen in view of Braida. Claims 2 and 6 have been rejected under 35 USC 103 as unpatentable over Chen in view of Braida and further in view of Basu. For the reasons set forth below, Applicants believe that the claims are allowable over the cited art.

The present invention is directed to a method and a system for performing a method for providing synchronization of audio to video comprising processing a video signal to generate a video output comprising at least one time stamped acoustic identification of the content of the audio associated with the video signal; processing an audio signal to generate an audio output comprising at least one time stamped acoustic identification of the content of the audio signal; and

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synchronizing the video signal to the audio signal by adjusting at least one of the signals to align at least one acoustic identification from the video signal with a corresponding acoustic identification from the audio signal. The invention includes, among other features, the generating of a video output with at least one time stamped acoustic identification and the generating of an audio output with at least one time stamped acoustic identification and the synchronizing of signals by adjusting at least one of the signals in order to align the time stamped acoustic identifications.

The primary reference, the Chen patent, is directed to a system and method for improving the appearance of a videophone display by fetching stored visemes which correspond to phonemes in the audio signal and overlaying the fetched visemes over the "live" videophone display in order to make the display appear synchronous with the audio (see: Col. 2, lines 31-34, Col. 3, lines 7-9). The fetched visemes are speaker-independent, meaning that the stored and overlain visemes are not visemes of the displayed speaker who is speaking on the videophone call (see: Col. 4, lines 6-10). After a period of time during which a call is ongoing, the Chen system can store visemes of the actual speaker and then overlay visemes of that speaker over the "live" display (Col. 4, lines 42-44). Nonetheless, however, the Chen system is not synchronizing the live video signal to the live

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audio signal, but is overlaying the live video signal with stored visemes.

The Chen patent does not teach or suggest the claimed feature of processing a video signal to generate a video output comprising at least one time stamped acoustic identification of the content of the video signal. Furthermore, the Chen patent does not teach or suggest that a video signal be synchronized to the audio signal by adjusting at least one of the signals to align the time stamped acoustic identification from the video signal with a corresponding acoustic identification from the audio signal. Rather, Chen superimposes a different video signal over the live video signal, the different video signal comprising visemes which have been fetched from storage. Applicants respectfully assert that the Chen patent does not teach or suggest the invention as claimed, and in fact teaches away from the claimed invention since Chen expressly teaches that the non-synchronous live video signal be covered up in order to appear synchronous, rather than aligned with the audio signal to actually be synchronous.

Applicants have reviewed the additionally cited Braida and Basu patents and respectfully assert that neither patent provides the teachings which are missing from the Chen patent. Neither Braida nor Basu teaches or suggests processing a video signal to create a video output of time stamped acoustic identification of the content, processing an audio signal to create an audio output

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of time stamped acoustic identification, and synchronizing the video to the audio signals by adjusting at least one to align the acoustic identifications in the signals. The Braida patent, which has been cited for time stamping, would not logically be combined with the Chen patent teachings, since there would be no reason to time stamp the live video signal of Chen due to the fact that Chen uses stored video/visemes and not the live video signal. Further, the Basu teachings of a Viterbi algorithm would not logically be combined with Chen since Chen does not seek to synchronize, but simply to overlay. One would not be motivated to use a Viterbi algorithm for alignment when alignment of audio to video signals is not done by Chen.

Based on the fact that none of the cited references teaches or suggests the features of the invention as claimed, Applicants respectfully request withdrawal of the obviousness rejections, entry of the amendments, and issuance of the claims.

Respectfully submitted,

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